# A LIST OF THE REPTILES AND BATRACHIANS COLLECTED BY THE LATE PROF. L. BALZAN IN BOLIVIA BY G. A. BOULENGER, F. R. S.

The large collection formed by the late Prof. Balzan for the Genoa Civic Museum, which adds much to our knowledge of the herpetological fauna of Bolivia, was made at the following places:

- 1. Coroico and Chulumani, Prov. Yungas, 1600 metres alt.
- 2. Reyes, right bank of Rio Beni.
- 3. Trinidad de Mojos, Rio Beni.
- 4. S.ta Ana de Movimas, Rio Beni.
- 5. Barraca, Rio Madidi.
- 6. Chililaya, on Lake Titicaca.
- 7. Missiones Mosetenes.

These numbers are used in the list to designate the localities.

#### REPTILIA.

## Emydosauria.

1. Caiman sclerops, Schn. (5).

#### Chelonia.

- 2. Testudo tabulata, Walb. (5).
- 3. Podocnemis unifilis, Trosch. (5).

### Lacertilia.

- 4. Anolis ortonii, Cope (1).
- 5. Stenocercus roseiventris, D. & B. (7).
- 6. Liolaemus multiformis, Cope (6).
- 7. Liocephalus caducus, Cope (1, 2, 5, 7).
- 8. Centropyx calcaratus, Spix. (7).
- 9. Ameiva surinamensis, Laur. (2, 7).

- 10. Neusticurus ecpleopus, Cope (7).
- 11. Pantodactylus schreibersii, Wiegm. (1).
- 12. Cophias dorbignyi, D. & B. (5, 7).
- 13. Mabuia agilis, Raddi (2, 7).

#### Ophidia.

- 14. Typhlops reticulatus, L. (5).
- 15. Glauconia albifrons, Wagl. (7).
- 16. Epicrates cenchris, L. (3, 4, 5).
- 17. Corallus hortulanus, L. (5).
- 18. Corallus caninus, L. (3, 5, 7).
- 19. Drymobius boddaertii, Sentz. (5).
- 20. Drymobius dendrophis, Schleg. (7).
- 21. Spilotes pullatus, L. (5).
- 22. Coluber dichrous, Ptrs. (5).
- 23. Coluber corais, L. (4).
- 24. Herpetodryas carinatus, L. (1, 4).
- 25. Herpetodryas fuscus, L. (5, 7).
- 26. Liophis poecilogyrus, Wied. (2, 4).
- 27. Liophis Guentheri, Peracca (4).
- 28. Liophis typhlus, L. (4).
- 29. Liophis reginae, L. (7).
- 30. Atractus latifrons, Gthr. (2).
- 31. Atractus balzani, sp. n. Snout obtusely pointed. Rostral small, a little broader than deep, just visible from above; internasals very small; praefrontals slightly longer than broad; frontal as long as broad, as long as its distance from the end of the snout, much shorter than the parietals; loreal twice and a half as long as deep; one postocular; temporals 1 + 2; six upper labials, third and fourth entering the eye; three lower labials in contact with the single pair of chin-shields, which are rather elongate, moderately broad, and separated from the symphysial. Scales in 17 rows. Ventrals 159; anal entire; subcaudals 32. Dark brown above, the scales on the sides lighter in the centre; yellowish beneath, finely speckled with brown,

scantily in front, closely on the posterior third of the body and on the tail.

Total length 400 mill.; tail 50.

A single specimen from Missiones Mosetenes.

- 32. Leptodira annulata, L. (2, 3, 7).
- 33. Oxyrhopus petolarius, L. (1, 7).
- 34. Oxyrhopus bitorquatus, Gthr. (2, 5, 7).
- 35. Oxyrhopus submarginatus, Ptrs. (2).

Eye smaller than in *O. bitorquatus*, only one third length of snout; praeocular not reaching the frontal, which is nearly as broad as long. Scales yellow at the base, black at the end; ventrals and subcaudals bright yellow, edged with black; end of snout and upper lip yellow; crown brown; occiput black.

A single specimen, with 200 ventrals and 66 pairs of subcaudals. Total length 830 millim.; tail 180.

- 36. Oxyrhopus labialis, Jan. (4).
- 37. Oxyrhopus cloelia, Daud. (2).
- 38. Philodryas olfersii, Licht. (1, 5, 7).
- 39. Erythrolamprus aesculapii, L. (1).
- 40. Homalocranium melanocephalum, L. (2, 5).
- 41. Elaps balzani, sp. n. Eye as long as its distance from the mouth. Rostral broader than deep; frontal considerably broader than the supraocular, slightly longer than broad, as long as its distance from the end of the snout, shorter than the parietals; latter as long as their distance from the internasals; one prae- and one postocular; temporals 1 + 1; seven upper labials, third not longer than fourth, third, fourth, and fifth entering the eye; four lower labials in contact with the anterior chin-shields, which are a little shorter than the posterior. Scales in 15 rows. Ventrals 198; anal divided; subcaudals 39. 26 equidistant, equal black annuli on the body, separated by narrower interspaces coloured yellow (red?) with black tips to the scales; a yellow band round the back of the head, across the parietals and temples, and extending to the chin.

Total length 650 millim.; tail 53.

A single male specimen from the Province Yungas, at an altitude of 1600 metres.

- 42. Elaps hemprichii, Jan. (7).
- 43. Elaps marcgravii, Wied. (2, 4).
- 44. Leptognathus catesbyi, Sentz. (4, 7).
- 45. Lachesis neuwiedii, Wagl. (4).

## BATRACHIA.

#### Ecaudata.

- 1. Engystoma ovale, Schn. (7).
- 2. Pseudis limellum, Cope (4).
- 3. Hylodes gollmeri, Ptrs. (7).
- 4. Ceratophrys cornuta, L. (3).
- 5. Leptodactylus typhonius, Dand. (2).
- 6. Leptodactylus bufonius, Blgr. (7).
- 7. Leptodactylus bolivianus, sp. n. Tongue oval, slightly nicked behind. Vomerine teeth in two arched series behind the choanae. Snout rounded, longer than the diameter of the orbit; nostril a little nearer the tip of the snout than the eye; interorbital space narrower than the upper evelid; tympanum very distinct, three fourths the diameter of the eve. Fingers moderate, first much longer than second; toes moderate, fringed on each side: subarticular tubercles moderate: two small metatarsal tubercles, inner oval, outer round; a fine tarsal fold. The tibiotarsal articulation reaches the eve, or between the eve and the nostril. Skin smooth above; a narrow very prominent glandular fold on each side of the back, from the upper eyelid to the groin; another fold from the commissure of the eyelids, bifurcating behind the tympanum, a short lower branch extending to the shoulder, whilst the main fold extend to the side of the body, where it is often broken up into a chain of glandules; sides of belly and lower surface of thighs granular. Grey above, with symmetrical darker markings expending into a cross-band between the eyes; dorso-lateral fold dark-edged; a dark canthal streak and temporal spot; upper lip with vertical dark bars, lower lip brown, with white spots; limbs with dark cross-bars;

belly white; throat spotted with brown. Male with small internal vocal sacs, and a large compressed oval tubercle, covered with a black horny sheath, on the inner side of the inner finger.

From snout to vent 105 millim.

Several specimens from Barraca and Missiones Mosetenes.

This fine new frog is nearest related to *L. ocellatus*, from which it differs in the presence of only two glandular folds on the back, the lesser development of the fore limbs in the males, and the presence, in the latter, of a single tubercle on the inner finger.

- 8. Leptodactylus ocellatus, L. (2, 4).
- 9. Leptodactylus caliginosus, Gir. (2, 4, 5).
- 10. Bufo marinus, L. (1, 2, 3, 5, 7).
- 11. Bufo crucifer, Wied. (7).
- 12. Bufo typhonius, L. (3, 5, 7).
- 13. Bufo granulosus, Spix. (2, 4, 7).
- 14. Hyla maxima, Laur. (7).
- 15. Hyla appendiculata, Laur. (5, 7).
- 16. Hyla cryptomelas, Cope (2).
- 17. Hyla balzani, sp. n. Tongue circular, entire, scarcely fine behind. Vomerine teeth in two oblique series on a level with the hinder edge of the large choanae, forming a chevron pointing forwards. Head as long as broad; snout rounded, as long as the diameter of the orbit; canthus rostralis feebly marked; loreal region concave; interorbital space a little broader than the upper eyelid; tympanum distinct, two thirds the diameter of the eye. Outer fingers one third webbed; toes almost entirely webbed; disks smaller than the tympanum; a very strong rudiment of pollex. The tibio-tarsal articulation reaches the tip of the snout. Skin smooth above, coarsely granular below (including the throat). Pale grey-brown above, finely spekled with blackish; upper lip white, some white spots on the flanks. Male with an internal vocal sac.

From snout to vent 33 millim.

A single male specimen from the Prov. Yungas, at 1600 metres altitude.

This species appears to be nearest related to Cope's *H. circumdata*, which I only know from the description, but which is distinguished by a stouter form in addition to its peculiar markings.

- 18. Hyla spegazzinii, Blgr. (4).
- 19. Hyla taurina, Stdr. (7).
- 20. Hyla venulosa, Laur. (2, 4).
- 21. Hyla nasica, Cope (2, 3, 5).